



For **47** years the only weekly report dedicated to the pallet industry.

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Questions should be directed to:

The Publisher, Industrial Reporting, Inc.

10244 Timber Ridge Drive • Ashland, VA 23005

800-805-0263 toll free • 804-550-0323 • 804-550-2181 fax

email: chailleb@gmail.com • web: www.palletprofile.com



Pallet Profile

WEEKLY

For **47** years the only weekly report dedicated to the pallet industry.

WHAT'S COMING ON BOARD?

Emerging Tech With Pallets and Materials Handling

High labor rates are leading to automation everywhere. This trend is also having an impact on warehouses and materials handling. More automation is likely to mean that pallet quality and maintaining tolerances and standards become a bigger deal in the present and especially the future. So, let's look at a few emerging tech solutions that could change palletization and materials handling in the future.

European warehouse and materials handling supplier, WDX, has introduced an automated truck loading and unloading system that eliminates the need for forklifts. This

system called the Q-Loader reduces the number of docks by five times compared to a standard approach. You can see an example video at <https://tinyurl.com/ffnwtbbc>.

The Q-Loader uses a forklift slide system to pick up and move an entire truckload at once. WDX claims this system can unload an entire trailer in two minutes. Each pallet moves down a conveyor and is turned to facilitate transfer to a robotic drive vehicle that takes a pallet load to the right place in the fulfillment center or Automated Storage & Retrieval Systems (ASRS).

(Continued on page 2)



No Profile Next Week!

Pallet Profile will not be published December 27, 2024, according to our regular schedule. The offices of Industrial Reporting, which publishes the *Profile*, will be closed from December 24, 2024 through January 1, 2025 for the Christmas holiday. Our offices will reopen on Thursday, January 2, 2025.

After the New Year, the Profile will resume its regular schedule and will be published again on January 3, 2025. Merry Christmas and Happy New Year to all of our readers!

MARKET REPORT

Eastern Pallet Market

Looking back at 2024, it has been a tough year for pallet manufacturers and the lumber market. And even though many contacts in these industries have a more positive outlook on the new year, most also believe it's safe to say there are still a number of challenges and concerns lying ahead. One pallet supplier in the North shared, "We've seen a lot of mills and pallet shops close up this year because of this messed up economy, and there's a lot of concern about lumber shortages come springtime as well as the possibility of trade wars.

It's going to take some time to get back to where we need to be, and it may not even be quick to turn around next year. Let's hope the new administration can get us back on track."

While we have heard from some pallet suppliers recently about an uptick in seasonal demand, there is still some uncertainty that it will carry over well into next year. Other than a possible rush to order goods before the Trump tariffs kick in, it could still be a rough road ahead. A manufacturer in the Southeast com-

(Continued on page 3)

Contact Rick Henretty
rick@palletprofile.com
804/550-0323
Fax: 804/550-2181
www.palletprofile.com

Emerging Tech With Pallets and Materials Handling

(Continued from first page)

Laszlo Horvath, the director of the Center for Packing And Unit Load Design at Virginia Tech, recently commented on the technology, "This is an interesting material handling method that will **significantly increase the life of pallets**. If there is no handling by forklift, there is **no product pallet damage**."

Watching the system run, a few things are clear. **Proper loading** is important for the forklift slide to efficiently grab all the pallets at once. And **pallet quality is important** because damaged pallets can easily throw a monkey wrench in millions of dollars of automated handling equipment. While these approaches are just beginning to catch on, **efficiency, speed and accuracy are critical for warehouse technology of the future**.

Walmart is playing catch up to Amazon with its fulfillment strategy, and the company is **deploying its next-generation fulfillment centers**. The company is backing numerous fulfillment approaches to see what works best. The company recently stated that

by 2025, 65% of its stores will be serviced by automation. The objective is to **eliminate human touches** and improve accuracy and speed. The jobs are getting easier because **technology is taking the products to human operators** instead of workers having to walk to get products to pick and pack. A **key focus is on safety and reducing worker strain**. Watch this video to see the Walmart approach, <https://tinyurl.com/5n63mjht>.

According to a recent research report by **Allied Market Research**, the **automated pallet truck market** was valued at **\$4.9 billion in 2023**, and is estimated to **reach \$27.3 billion by 2033**, growing at a CAGR of 21.4% from 2024 to 2033. All signs point to **more autonomous or automated forklifts being deployed across a wide variety of facilities** in supply chains. Some pallet manufacturers and recyclers are even evaluating the technology right now.

Another technology that is being deployed in warehouses and distribution centers is **pallet in-**

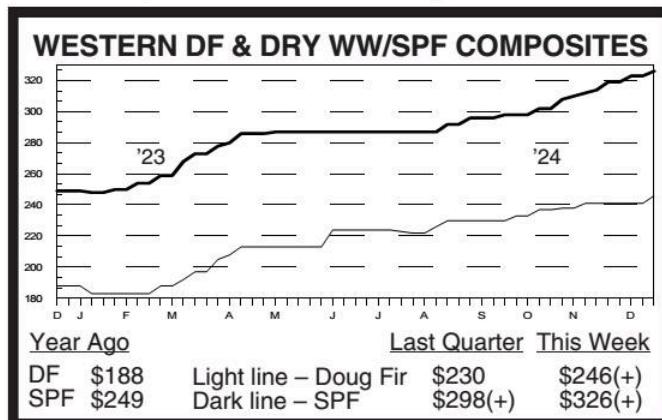
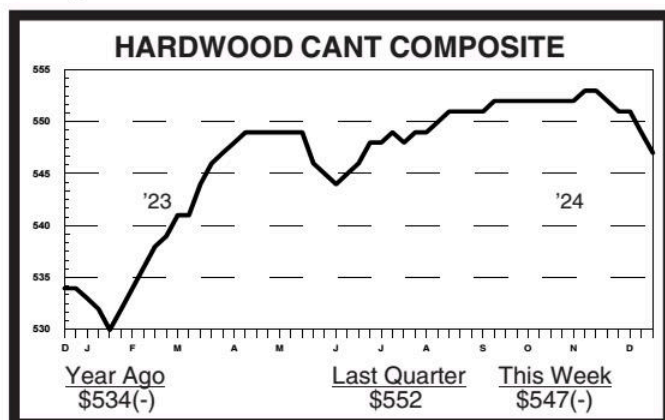
spection technology. These systems help **pallet users monitor quality, sort out the best pallets, develop data on pallet quality and much more**. The *Profile* believes this technology will grow in its utilization by both pallet users and suppliers. **Artificial intelligence can improve the sortation and data analysis capabilities** compared to human operators. One outcome of this technology will be **greater information in the hands of the retailer or the recycler who uses it**. This could also reduce the number of quality cores on the market as emitters push out more junk and do a better job of culling pallets.

Earlier this year, a **report by MHI and Deloitte** explored technology trends taking place globally in supply chains. An example of a new innovation that could radically change supply chains are **robotic loading platforms** with up to 10 double-stacked pallet positions that can be pre-loaded in a staging area and then moved into a trailer. These **SlipBots developed by**

(Continued on page 3)

Lumber Price Trends

These two composite hardwood and softwood graphs reflect the overall trends in average **price movement** for **hardwood cants** and **western RL DF/SPF softwoods**. Pluses and minuses indicate directions of price change movements at the indicated times when compared to the previous week's average.



Emerging Tech, Pallets and Materials Handling

(Continued from second page)

Slip Robotics seek to improve operational efficiencies, improve safety while reducing pallet damage, poor visibility and more. According to Slip Robotics, the case study highlighted by MHI resulted in **trailer loading times reducing from 40 minutes to only three minutes. Pallet damage was reduced by 40%** and dock and truck driver productivity rose by 400%. To see an example of this technology in operation, see the video at <https://tinyurl.com/433du653>.

Finally, even the idea of what constitutes a pallet may be changing. What if you could use a pallet that flies? Researchers in Seoul have developed the **Palletrone** (pallet plus drone) which provides a hovering platform for cargo. Sort of like a **fly-ing pallet cart with propeller arms** that can rotate and thrust a load in any direction. The developers claim it is **ideal for managing stairs and uneven terrain**. Currently, it can **handle around 6.6 lbs.** So, the Palletrone won't replace a typical pallet any time soon. But it does **show what is possible** and how people are dreaming about the future. You can see the video <https://tinyurl.com/vfav6uj9>.

How are your customers changing their supply chains to accommodate new technology? As a pallet supplier, this should be on your mind for 2025. If you haven't had a discussion about their technology and pallet quality/standard needs, **consider scheduling a visit of a facility and try to see how you can help them solve any pallet issues.** Pp

Trucking and Freight Trends for the End of 2024

The **trucking sector is slowly improving** after a significant freight recession. That appears to be the assessment from **leading trucking and transportation reports** and data sources as we approach the end of the year.

According to the Cass Freight Index® **shipments rose half of a percent from October to November after two consecutive declines**. The researchers behind the Cass Index further commented, "On a year-over-year basis, shipments declined by 0.7% in November, the narrowest decline in 21 months. **Ongoing economic growth and slowing private fleet capacity additions** are helping to narrow the year-over-year declines, but the normal seasonal pattern would have the index down about 3% year-over-year in December."

Craig Fuller, CEO at FreightWaves, a major transportation research and reporting firm, recently commented, "It's becoming evident that the **truck-load market has experienced a peak season stronger than those of the past two years**. While questions remain about whether this is merely a seasonal 'Santa rally,' there are signs point-

ing towards a **recovery from the Great Freight Recession.**"

Freightwaves data suggests that the **freight market bottomed out in May 2023** and improved slowly ever since then. Fuller wrote, "The real surge didn't materialize until after the election."

The Owner-Operator Independent Drivers Association (OOIDA) recently released its third quarter report noting that **rates are starting to rise mostly because capacity is right sizing to actual demand**. But general goods **manufacturing activity remains soft** although the market is headed in the right direction. To read the full report, visit <https://tinyurl.com/45unhx26>.

Data from the American Trucking Associations (ATA) showed that **tonnage has been slowly climbing since hitting a low of 111.0 points in January 2024**. The latest data from its tonnage index shows it even **gained 3% since that point**, reaching 114.6 in October. But that still is **well below where the cycle peaked at 118.8 in September 2022**. Unfortunately, much of the economic growth recently has been in services, which does little for freight or pallet demand. Pp

Eastern Pallet Market

(Continued from first page)

mented, "**The million-dollar question is, what will it take to turn manufacturing around in 2025?** We have not seen anything lately to be super optimistic about from the demand side in 2025."

Hardwood material remains tight to average in most areas east of the Rockies. We continue to see some slight downward movement in cant prices being offered by mills in the

South. Even some areas where prices have recently seen mild increases, contacts are now reporting mills offering discounts to move material and keep production moving. A contact in the Central South shared, "**I have no clue as to how mills can continue to operate at these low numbers**. No one can afford to buy timber on the stump with these low lumber prices. **Any**

(Continued on page 4)

Market Report

(Continued from third page)

great turn in demand will affect the supply chain with limited lumber and higher prices.

Softwood pallet producers continue to report purchasing more SYP as the material remains very available, and the price spread between SPF and SYP has widened. SPF buyers continue to experience very limited low-grade material from the Northwest as many mills in that region are off the market on any low-grade offerings. A Midwest buyer of SPF said, **“Unless we see a serious turn around in the U.S. housing market,** controlled inflation and better negotiations of additional tariffs on Canadian imports, things could get ugly, and we could see a lot of **increased pressure on SYP mills to pick up the slack.”**

In the **Northeast through the Mid-Atlantic**, log and lumber availability remains tight to average as wet winter weather continued to impact parts of the region this week. Lumber inventories are reported as average this week. **Cant prices have leveled out** for the most part in the region. Pallet demand is average with some pockets reporting increased demand. Pallet prices are mostly steady.

In the **Midwest**, log and lumber availability has been tight to average. However, below freezing temperatures moved into the region this week which some contacts hope will bring a **deep freeze to the ground** enabling loggers to access timber better than last year. Lumber inventories are average with some pockets of plentiful supply. Cant prices in the region saw some areas of mild decreases. Pallet demand is spotty to average with

pockets of strong demand.

In the **South and Southeast**, hardwood log and lumber availability is mostly average this week with pockets of the Central South and Southeast reporting plentiful supply. Hardwood cants saw some continued mild price decreases this week. Softwood log availability remains plentiful in most areas. **Pallet demand is reported as average to strong with some contacts seeing very strong demand.** One Western South contact stated, “We’re in the season where minds are in other places. As much as you try to stay ahead of your customer needs, they run out of purchase order numbers that won’t allow you to ship and get paid. Frustrating.” Pallet prices remain overall steady with pockets of mild upward pressure.

Western Pallet Market

Western lumber suppliers continued to report a lot of **uncertainty this week** as we’re about to close out another year. One broker in the region commented, “We are starting to see some major corrections in the market, especially for #3 and 2&btr. **Prices are continuing to go up, and there is a lot of uncertainty** about lumber prices going into January/February. **Will Trump add another tariff** on Canadian lumber, or will he leave it to the current system?” This contact noted, **“After visiting numerous**

QUOTE OF THE WEEK:

“Here’s hoping 2025 will be a much better year for our industry than 2024 was. But I will keep plenty of Tylenol on hand just in case!”

(Pallet manufacturer in the North)

Canadian mills last week, they are a bit scared.”

It’s being reported that **more mills in the region are off the market on low-grade material for the remainder of the year.** A lumber supplier in the Washington/Oregon area told us, “We’re seeing more Canadian mills go off the market on all low-grade into the United States **because of duties and new pending tariffs.** Other mills are now quoting wood order files well into January.” Even though the higher-grade prices continue to go up, **low-grade lumber still remains cheap comparably.** Most suppliers say they feel strongly that prices will continue to go up through February. How much will depend on the new tariffs imposed by President-Elect Trump.

Pallet manufacturers report average to slightly increasing demand in some areas as we close out the year. Some contacts say they are seeing a bit of an uptick in last-minute retail orders as well as some pallet buyers preparing for a surge in imports/exports before any new tariffs hit. However, as one contact in the New Mexico area shared, **“Demand is up, but the prices are not!”** Many pallet suppliers still face pressure from buyers to keep prices low. They also continue to face **heavy competition from the recycled pallet market** where availability and prices remain a strong draw for customers. PP

Eastern/Southern/Northern/Midwestern Pallet Industry

The following information describes the conditions and prices prevalent to areas east of the Rocky Mountains. All hardwood lumber prices are for low-grade, mixed dense, rough and green hardwoods. With the exception of cut stock, which is priced by the piece, all lumber prices are reported as delivered prices per thousand board feet. Prices are typical average prices reported by our information network. Green pine cant

prices are reported in three regions.

The modified 48x40 GMA grocery pallet is used as a barometer of pallet pricing. Typical prices for the New 5/8" deck & 1³/₈" stringer GMA pallet are reported.

Plus and minus signs after lumber and pallet prices indicate the direction of price changes when compared to last week's *Pallet Profile*.

No attempt is made to forecast future prices.

Region	HW Cants 4x6, 3-1/2x6 8'-16' delivered	Boards 1x4, 1x6 8' - 16'	Cut Stock Per piece 5/8x4x40	Delivered Hardwood GMA Pallet	Green Pine Cants	2x4 SYP RL Regional Avg Delivered	2x6 SYP RL Regional Avg Delivered	2x4 SPF RL Regional Avg Delivered	2x6 SPF RL Regional Avg Delivered	Delivered Kiln Dried Softwood GMA Pallet
NORTHEAST					NA					
No. N. Eng.	\$615	\$405	64¢	\$15.75		#3: \$380(-)	#3: \$340	#3: \$460	#3: \$370	\$
So. N. Eng.	\$615	\$380	60¢	\$16.00						\$
Western PA	\$575	\$410	63¢	\$15.25		#4: \$305	#4: \$290(+)	#4: \$355	#4: \$300	\$
Mid-Atlantic	\$575	\$400	60¢	\$15.00						\$14.50
Western NY	\$570	\$400	60¢	\$15.00						\$14.00
MIDWEST/ GREAT LAKES					\$430					
West Virginia	\$540(-)	\$435	58¢	\$14.90		#3: \$380(-)	#3: \$335	#3: \$485	#3: \$410	\$14.50
Ohio	\$580 ²	\$465	65¢	\$15.50						\$14.50
Indiana	\$540	\$420	60¢	\$15.00						\$
Michigan	\$485 ¹	\$425	59¢	\$14.90		#4: \$305(+)	#4: \$290(+)	#4: \$370	#4: \$355	\$14.50
Illinois	\$570	\$450	60¢	\$15.25						\$
Wisconsin	\$540	\$420	59¢	\$15.50						\$
Minnesota	\$545	\$430	61¢	\$14.50						\$14.50
Iowa / Nebraska	\$550	\$440	59¢	\$15.50						\$15.00
EASTERN SOUTH					\$425					
Virginia	\$555	\$450	68¢	\$16.00		#3: \$375(-)	#3: \$340	#3 N/A	#3 N/A	\$14.75
North Carolina	\$585	\$440	69¢	\$15.50						\$14.90
South Carolina	\$580(-)	\$440	68¢	\$15.50		#4: \$320	#4: \$305	#4 N/A	#4 N/A	\$
North Florida	\$555	\$450	63¢	\$16.00(+)						\$15.00(+)
Georgia	\$560	\$430	61¢	\$15.50						\$
CENTRAL SOUTH					\$425					
Alabama	\$520	\$450	62¢	\$15.25		#3: \$355(-)	#3: \$300	#3 N/A	#3 N/A	\$14.25
Mississippi	\$465	\$410	62¢	\$15.00						\$
Tennessee	\$520	\$370	63¢	\$15.75		#4: \$275	#4: \$250	#4 N/A	#4 N/A	\$
Kentucky	\$465	\$320	60¢	\$15.50						\$15.00
WESTERN SOUTH					\$425					
East Texas	\$555(-)	\$300	55¢	\$14.25		#3: \$360(-)	#3: \$310	#3 N/A	#3 N/A	\$14.00
Louisiana	\$550	----	----	\$15.00						\$14.50
Arkansas	\$485	---	60¢	\$14.50		#4: \$290	#4: \$270	#4 N/A	#4 N/A	\$14.25
Missouri	\$515(-)	\$400	67¢	\$15.75						\$15.00
Kansas / OK	\$575	\$425	60¢	\$17.75						\$

¹ RW & RL ² Southern Ohio prices may be less due to lower freight costs, proximity to materials, and other factors.

West Coast and Canadian Pallet Industry

All lumber costs are representative of typical economy lumber prices fob delivered to pallet companies in the reporting regions and are expressed in \$/Mbf. Prices are in U.S. dollars in U.S. regions and Canadian dollars in Canadian regions.

Plus and minus signs after lumber prices indicate the

direction of price changes when compared to last week's *Pallet Profile*. Prices are moved in increments which make comparisons meaningful. No attempt is made to forecast future prices. It is normal to expect variations due to market fluctuations and particular circumstances.

Western Economy Lumber Prices	Southern California	Northern California	Pacific Northwest	British Columbia/Alberta	Ontario	Quebec
2 x 4 RL DF (Green)*	\$275*	\$260*	\$230(+)*	----	----	----
2 x 6 RL DF (Green)*	\$250*	\$240*	\$220(+)*	----	----	----
2 x wides RL DF (Green)*	\$225*	\$210*	\$195(+)*	----	----	----
2 x 4 RL Dry White Wood/SPF	\$370(+)	\$355	\$340(+)	\$340(+)	\$415	\$390
2 x 6 RL Dry White Wood/SPF	\$305(+)	\$290	\$295(+)	\$315(+)	\$375	\$370
2 x wides RL Dry White Wood/SPF	\$280	\$270	\$255(+)	----	----	----
1 x 6 x 40 Utility & Better SPF Canada**	\$475**	\$460**	----	----	----	----
2 x 4 x 48 Notched SPF Canada**	\$480**	\$475**	----	----	----	----
1 x 6 x 40 Utility & Better SPF US**	\$450	\$445	----	----	----	----
2 x 4 x 48 Notched SPF US**	\$455	\$450	----	----	----	----
Canadian Hardwood Cants	----	----	----	----	\$675	\$660
% Plant Capacity Used	80%	80%	80%	80%	80%	80%
Lumber Inventory	Average	Average	Average	Average	Average	Average
Pallet Price Direction of Movement	Pallet prices are steady					

* KDRL Doug Fir – an additional \$40-100/M

**KD U.S. precut prices are usually less than Canadian.



Trumponomics Special Report

Economic and political impact of a second Trump administration on the overall forest products sector and specifically the pallet market

By Chaille Brindley

Editor's Note

The *Pallet Profile* and *Recycle Record* over the last month have issued a series of articles on the second Trump administration. These articles formed the basis for this special report. The Executive Summary is free for all *Pallet Profile* and *Recycle Record* subscribers to send to third parties and their customers. Also, the full report is free for subscribers to send to anyone within their company to review. The only prohibition is the publishing of this special report online or on social media or making it available for the general public to access in any way. If you have copyright questions, please contact the publisher, Chaille Brindley at chaille@ireporting.com.

Executive Summary

From the outset, the policy priorities and personnel that are emerging for the second Trump administration are a mixed bag for the pallet and lumber sectors. And a lot depends on the details of various policy shifts. Trump is clear on top-line priorities while being cagey on specific details. Many people are wondering how much of the tough tariff talk for example is serious versus just posturing for improved negotiations with foreign leaders. The outcome of those decisions will shape the future of the industry over the next four years. Let's look at the good and the bad keeping in mind that everything is in flux.

The Good

- Overall economic sentiment is positive as the Trump administration has embraced a pro grow, anti-regulation philosophy focused on unleashing the ability of the American economy to generate new companies, products, and technologies. This positive sentiment has top-level leaders more willing to embrace new business development efforts and seeking funding with the idea that they will face less regulatory roadblocks.
- Making the 2017 Trump tax policies permanent and enacting other tax reforms are widely considered a boon to business and economic growth. But it could come with some major national debt implications if the White House isn't able to deliver on its promises to cut government waste.
- Cutting government waste is

good because long-term deficits are not sustainable and will negatively affect the global standing of the U.S. and its currency.

- Some key tax priorities of the industry would certainly be part of Trump tax law changes. These include the 199A qualified business income tax deduction, 100% expensing for certain business assets, estate tax limits, etc.
- Even before he takes office, Trump's tariff proposals are causing major corporations to change some of their plans, such as stocking up on imported goods before tariffs are enacted. They are also considering how to cope with the levies if and when enacted—whether they will be able to raise prices and whether they will need to find alternatives to their Chinese manufacturers. As a result, pallet demand near

the ports could jump significantly over the next two months as companies rush to avoid any potential Trump tariffs or restrictions. This would be merely frontloading of stockpiles that would otherwise manifest throughout the year.

- Look for the Trump administration to enact tough border policies on Day One and to begin a process of deporting criminals and people who have been denied their asylum claims. Tougher border policies have many benefits for the country, such as keeping criminals out of the country and stopping the flow of illegal drugs and human trafficking.
- President-Elect Trump made a number of proposals on the campaign to boost housing supply. This would be good news for the forest products sector as well as



pallet demand. Trump wants to bring down inflation and building costs by cutting costly red tape as well as boosting energy supply. Trump also suggested that by deporting millions of illegal aliens, more housing would open up for citizens.

- Tariffs and tough international trade policies could encourage some companies to relocate factories or fabrication facilities to the United States. If this happens, it would be a big benefit for pallet demand.

- Trump wants to pursue an aggressive energy agenda that includes fossil fuels. Overall, greater domestic oil production is likely to push down pricing as it did during the first Trump term. Streamlining regulations and putting fossil friendly leadership at the top of agencies will help spur production. This could boost pallet demand in the coastal areas near domestic oil production and refining.

The Bad

- Jason Ortega, the vice president of public affairs for the National Wooden Pallet & Container Association (NWPCA) recently warned that tough border policies

could lead to more open jobs and fewer workers to fill them.

- The U.S. hardwood sector was targeted by China after Trump hit Chinese steel with major tariffs in 2018. Part of Trump's campaign pledges is to heat back up tariffs on imported goods. He especially mentioned a possible 65% tariff on all Chinese imports. Just like last time, China may impose retaliatory tariffs on agriculture products, especially logs and lumber, to hurt rural voters that supported Trump.

- The last time a trade war erupted between the United States and China, American hardwood producers lost significant market share to other countries. A 2023 report noted that the United States has been one of the main lumber exporters to China, accounting for 20% of China's lumber imports in 2018. The share was dropped to 13% in 2019 as a direct impact of US-China trade war.

- Active ICE enforcement could cause some illegal workers to go underground or avoid companies that do background checks. Some legal analysts have predicted that the Trump administration could require E-Verify usage

for all companies. Federal contractors are already required to check compliance for employees using E-Verify. More regular or stringent workplace audits or recordkeeping could put extra pressure on smaller pallet companies. Many large players already have strong policies in place to weed out unauthorized workers.

- Tougher border policies may cause extreme distress in immigrant communities or raise conflicts with local law enforcement. On the business side, a worsening labor pool could drive more automation in many pallet plants.

- Deporting illegal aliens will likely increase labor costs for the housing sector. According to the National Association of Homebuilders, about 31% of construction workers in the U.S. were immigrants.

- If tariffs on Mexican and Canadian imports develop, they could drive up energy costs because a lot of current U.S. oil consumption is supplied from international sources coming from those two countries.

- Tariffs could also affect the cost of equipment parts and other imports used in U.S. goods. Trump has suggested that he might impose an across-the-board 10% tariff on imported goods. These potential tariffs would drive up the cost on everything for pallet companies from machinery to nails to imported lumber to supplies.

Overall, the Trump presidency should provide both benefits and challenges to the pallet sector. If the economy booms, all the challenges might seem insignificant by comparison. But too much is uncertain to know if Trumponomics will be viewed by the industry as a blessing or curse. Being aware of the various factors covered in this report will help pallet companies develop their own strategies and navigate through any scenario that may arise. ■